

Title (en)
POLYETHYLENE FILM FOR HEAT SEALING

Title (de)
POLYETHYLENFOLIE ZUM HEISSIEGELN

Title (fr)
FILM DE POLYÉTHYLÈNE POUR THERMOSCELLAGE

Publication
EP 4132787 A1 20230215 (EN)

Application
EP 21715925 A 20210406

Priority
• CN 2020084273 W 20200410
• EP 20171711 A 20200428
• EP 2021058935 W 20210406

Abstract (en)
[origin: WO2021204799A1] The present invention relates to a film comprising a sealing layer comprising a polyethylene A comprising moieties derived from ethylene and moieties derived from an α -olefin comprising 4 to 10 carbon atoms, the polyethylene A having a density of ≥ 870 and ≤ 920 kg/m³, preferably of ≥ 900 and ≤ 920 kg/m³, as determined in accordance with ASTM D792 (2013), wherein the polyethylene A has: • a fraction of material that is eluted in analytical temperature rising elution fractionation (a-TREF) at a temperature $\leq 30.0^\circ\text{C}$ of ≥ 5.0 wt% and ≤ 15.0 wt%, preferably ≥ 7.5 wt% and ≤ 12.5 wt%, with regard to the total weight of the polyethylene; and • two distinct peaks in the a-TREF curve in the elution temperature range of between 50.0 and 90.0 $^\circ\text{C}$, wherein the elution temperature gap between the two peaks is $\leq 17.5^\circ\text{C}$, preferably $\leq 15.0^\circ\text{C}$. Such film allows for sealing of the film at a desirably low temperature, whilst still providing a desirable seal strength. Furthermore, such films demonstrates a desirably high heat stability.

IPC 8 full level
B32B 27/08 (2006.01); **B32B 27/32** (2006.01); **C08J 5/18** (2006.01)

CPC (source: EP KR US)
B32B 27/08 (2013.01 - EP KR); **B32B 27/32** (2013.01 - EP KR US); **C08J 5/18** (2013.01 - EP KR US); **C08L 23/0815** (2013.01 - EP KR US); **B32B 2250/05** (2013.01 - KR); **B32B 2250/242** (2013.01 - EP KR); **B32B 2250/40** (2013.01 - US); **B32B 2270/00** (2013.01 - KR US); **B32B 2307/31** (2013.01 - EP KR US); **B32B 2307/732** (2013.01 - US); **B32B 2309/105** (2013.01 - KR); **B32B 2439/00** (2013.01 - KR); **B32B 2439/70** (2013.01 - EP US); **C08J 2323/06** (2013.01 - EP); **C08J 2323/08** (2013.01 - EP KR US); **C08J 2423/08** (2013.01 - EP US); **C08L 2203/162** (2013.01 - EP US); **C08L 2205/025** (2013.01 - US)

Citation (search report)
See references of WO 2021204799A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2021204799 A1 20211014; CN 115379950 A 20221122; EP 4132787 A1 20230215; KR 20220166303 A 20221216; US 2023151164 A1 20230518

DOCDB simple family (application)
EP 2021058935 W 20210406; CN 202180027525 A 20210406; EP 21715925 A 20210406; KR 20227038703 A 20210406; US 202117917698 A 20210406